

The Stanford Achievement Test Series (1982)
as Adapted for Use by the Visually Handicapped

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Louisville, Kentucky

1984

(Final Report)

The Stanford Achievement

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Abstract

The article gives specific information on the braille and large type editions of the Stanford Achievement Test Series (1982 edition). It further denotes differences from previous editions and gives explicit detail on the process of adapting tests into braille and large type.

The Stanford Achievement Test Series (1982)
as Adapted for Use by the Visually Handicapped

Adapting and publishing the 1982 edition of the Stanford Achievement Test Series (Stanford 1982) has given a continuation to the commitment of the American Printing House for the Blind (APH) in supplying standardized achievement materials in braille and large type. APH printed the original Stanford Achievement Tests in braille in 1926. Early editions of achievement tests were often a cooperative effort between APH and other agencies or individuals. As each edition was published, added components were developed that related to the visually handicapped. By 1972 the present format of publication had been reached. Morris (1973) gives an excellent account of the history of academic test adaptation.

At the present time it would be generally agreed that the present edition and future editions of such a test are a valid activity of the Department of Educational Research of APH. However, the scope of the task would more than likely prohibit thoughts of producing another such achievement test to be offered at the same time. The idea is not ruled out but questioning the possibility has spurred an activity of surveys and a test needs meeting from which the response supported alternative activities in the area of providing tests.

The Stanford 1982 is not unique in its format to users of past achievement publications of APH. While this is true, however, many aspects of the test should be mentioned so that those who choose to use this instrument for the evaluation of student progress may have clearly in mind just what the process entails.

For any subtest where items were omitted, APH contracted with Psychological Corporation to develop norms from the original norming data to reflect only those items appearing in the braille edition of the tests. Considering that the renorming was required due to dropped items in some subtests, a cautionary word on this is in order. An item may not be appropriate for adaptation for two reasons. One, the item simply cannot be rewritten in tactile form or, two, it is meaningless to the blind student if adapted because the skill, in all likelihood, can never be developed or the information being evaluated is learned in a completely different manner by the braille/tactual learner. Consequently, when the item is dropped and the test renormed, the test is not evaluating the blind student with the same information that is used with the sighted student. This, of course, gives him some slight advantage over his sighted peers and some thought should be given to this as test bias is being eliminated. The conversion table (print to braille) in the supplemental Directions for Administering can be

consulted to determine which items were dropped from the regular print edition of the Stanford 1982 tests. These items should be reviewed by the teacher to determine if there are alternative teaching and testing approaches to the information being tested in the omitted item. The determination here is to investigate that test bias that is eliminated, item by item, and determine what of it is testing knowledge that is forever meaningless to the visually handicapped and what of it can be taught and evaluated in other ways. A thoughtful approach to this problem is necessary. Naturally, a commercial print edition of the test must be on hand for this to take place.

While the Stanford 1982 is a norm-referenced test, much was taken into account by the Psychological Corporation during the preparation of the test so that the content would reflect the more widely used textbooks, syllabuses, and state guidelines and specifications. Recent research pertaining to children's vocabulary and concept development at various ages and grades was also a consideration.

Unlike the other levels of the tests, the TASK 1 and 2 levels are not based on the content of any courses taught at the secondary level, but rather on the skill required for responsible living in an adult world (TASK 1) and those skills needed as a basis for further formal education (TASK 2). This is an important departure from the

Stanford Achievement Test Series of 1972. In that series these levels overlapped but were for explicitly different grade levels, as are the other present levels of Stanford 1982.

To analyze the data developed in this manner, approximately 100,000 students in 50 school systems were given the item pool to determine the items to be chosen for the final edition. This approach was used to determine the appropriateness of the item types and objectives, the difficulty and sensitivity of the items, the grade progression in difficulty, the effectiveness of the options, the administration time, and the reactions of pupils and teachers to the clarity, format, and content of the test materials (Psychological Corporation, 1983).

At this point, Psychological Corporation delivered the entire item pool to APH. The primary object of this delivery was to enable APH to evaluate the material item by item and to furnish Psychological Corporation information as to which of the items were easily adapted, which items presented problems in adaptation, and which items were not adaptable into braille. In this way, if there were a choice between items, Psychological Corporation could choose the item that had the least difficulty in terms of braille adaptation. This is the first time that a test corporation has given APH this particular opportunity.

Following this, standardization of the tests took place to

accomplish fall standardization, the equating of forms, equating of levels, midyear standardization, and spring standardization. The midyear standardization involved kindergarten and first grade and is not relevant to the braille or large type editions. The fall and spring standardization involved between 200,000 and 250,000 students each. All of these (at the levels adapted by APH) were given the Otis-Lennon School Ability Test as well as the Stanford. The norms developed in this way are those used for the visually handicapped. Other than adjustment when items were dropped in the braille edition the visually handicapped student is being compared to sighted students.

The Stanford 1982 has followed its predecessors in format to the extent that any person having used a past edition will have no surprises in administering the test, scoring the test, or utilizing the information obtained. However, there are aspects of the tests which should be mentioned as they are timely and an alteration of previous tests.

The TASK levels 1 and 2 of the braille and large type editions are divided into 2 parts. These are (a) the Basic Battery which contains Reading Vocabulary, Reading Comprehension, Mathematics, Spelling, and English and (b) the Science and Social Science tests which covers these two areas. For the first time these may be ordered separately. The adapted supplemental Directions for

Administering is common to both TASK levels 1 and 2.

A further most important change in the tests is the intended administration levels for TASK 1 and 2. The 1972 TASK I (arabic numerals are used for the 1982 levels for differentiation) was intended for grades 8 through 10. That edition of TASK II continued with grades 11, 12, and the freshman year in junior community colleges. The 1982 TASK 1 is to be given to students in grades 8 through 12 for whom the assessment desired is that of adult competency at the social level. Skills and competencies are measured that presumably have been learned prior to the eighth grade. The 1982 TASK 2 is to be given to grades 9 through 13. This test assesses those skills that are requisite to continued academic training. This is an extremely important feature when considering today's visually handicapped population. There will be no advantage in giving the wrong level of TASK to a student. A decision of this choice should be made at the time a case conference is held.

While it is common knowledge, it should be stated that the Stanford Achievement Tests are power tests rather than speed tests. Consequently, although an option is offered to administer them either with or without time limits, it is strongly recommended that the tests be given WITHOUT strict time limits. The times given in the supplemental Directions for Administering are merely suggested as an administrative convenience for use when absolutely necessary. The

times for each test were determined by multiplying the regular administrative times by 2 1/2 for braille editions and 1 1/2 for large type editions. Even so, the suggested times may not be adequate for slower readers. Such pupils should be tested separately so as not to delay an entire group.

When administering the tests, all parts of the subtests must be administered. Parts are not equivalent and total scores may not be prorated from partial information. When seeking remedial strategies within the manuals published by Psychological Corporation, this becomes extremely important.

The Stanford 82 batteries and their grade levels are:

LEVEL	GRADES
*Stanford Early School Achievement Test 1	K.0 - K.9
*Stanford Early School Achievement Test 2	K.5 - 1.1
*Stanford Achievement Test, Primary 1	1.5 - 2.9
Stanford Achievement Test, Primary 2	2.5 - 3.9
Stanford Achievement Test, Primary 3	3.5 - 4.9
Stanford Achievement Test, Intermediate 1	4.5 - 5.9
Stanford Achievement Test, Intermediate 2	5.5 - 7.9
Stanford Achievement Test, Advanced	7.9 - 9.9
Stanford Test of Academic Skills, TASK 1	8.0 - 12.9
Stanford Test of Academic Skills, TASK 2	9.0 - 13.

Norms accompanying the supplemental Directions for Administering include grade equivalents, scaled scores, percentile ranks, and stanines for all grade levels. For those subtests in the braille editions where items have been omitted, this information is given in

*Not produced in braille or large type.

the APH supplemental Directions for Administering. Some levels of the tests do not have norms furnished for fall administration at some grade levels. While this information is furnished in the specific supplemental Directions for Administering for each test, a list of these follows.

LEVEL OF TEST	FALL NORMS FOR GRADES	SPRING NORMS FOR GRADES
PRIMARY 2	3	2 - 3
PRIMARY 3	4	3 - 4
INTERMEDIATE 1	5	4 - 5
INTERMEDIATE 2	6 - 7	5 - 7
ADVANCED	7 - 9	7 - 9
TASK 1	8 - 12	8 - 12
TASK 2	9 - 13	9 - 12

A copy of the supplemental Directions for Administering should be obtained and read before tests are ordered for testing. In a study done by Willis (1983) it was found that approximately 35% of the scores reported by schools were scores resulting from a student having been given the wrong level of the Stanford Achievement Test Series (1972), for their assigned grade level. While some provision is made for this through the overlapping norms, it is poor practice. With the time required, nothing is gained by giving a student a lower or higher level of the test than his grade as the information becomes

further distorted. Caution is used in comparing visually handicapped students to the sighted population but to do so out of level distorts the information to an even greater extent.

Some subtests included in the Stanford 1982 differ from those included in the 1972 edition. While some of these are a division or a renaming of earlier subtests, Table 1 will give the explicit subtests in both the braille and the large type editions. Note that there is an indication on the table as to when braille subtests are divided. The decision to divide a subtest took into account only that, undivided, the subtests would have taken longer than 75 minutes to administer. This is the longest period of time that Psychological Corporation recommends for administering a subtest. When a test was divided, the instructions and samples were repeated before each part. As questions within tests were arranged to become progressively more difficult, the division was done on an odd number even number basis so that the two parts would be of similar difficulty. Naturally, when sets of questions appeared together, as when they required reference to the same table, these were retained as sets. Each part in the split test was renumbered from one. The Print to Braille Tables listed in the supplemental Directions for Administering give information showing this.

Insert Table 1 about here

After the standardization edition was received by APH the actual adaptation process was begun. The initial activity was to edit the actual tests for braille and large type reproduction. Format of the braille tests was changed, keeping in mind the possibility that an answer sheet might or might not be used. Other aspects of the braille adaptation such as realignment of answer choices, giving only "a" through "e" answer choice format in case APH answer sheets are used, splitting and renumbering tests which would have been too long to administer in one setting, the sizing of graphics, etc. were done at this time. The primary change in the large type format was to rewrite all directions that referred to answer sheets since it is customary not to use answer sheets with large type tests.

With the tests in the hands of braille and large type production units the rewriting of the administration manuals took place. This is an extensive task in that very little exists in an administration manual for a regular print test that does not have to be rewritten for either braille or large type administration. Twelve manuals were involved; one for each of the six levels adapted into braille and large type. These manuals include general directions, specific directions concerning the visually handicapped, proposed schedules for administering, directions for scoring, lists of correct answers, norms tables for tests with omitted items

(braille), etc. Of course, as much of the procedures and wording of the original manuals was maintained as was possible. Prior to being sent to press, these manuals were compared to the finished braille and large type test booklets as a final check on the adaptations.

If, for specific reasons, an oral administration is necessary, the teacher will have to adjust the manual and the test booklet to this mode. While this type of administration is acceptable, it may result in slightly inflated scores (Davis & Nolan, 1961) in that it relieves the student of the reading and writing aspects of the test.

The 1982 Stanford Achievement Test series promises to fulfill the need for an updated series of achievement tests very well. With the content reflecting course content in the Primary 2 through the Advanced levels, a teacher can be assured of a valid comparison between her visually handicapped students and students in the mainstream of the educational system. The TASK levels being for two distinct groups also gives an additional educational advantage.

Braille and large type editions of the Stanford Achievement Test series are presently available from the American Printing House for the Blind.

References

- Davis, C. J., & Nolan, C. Y. A comparison of the oral and written methods of administering achievement tests. International Journal for the Education of the Blind, 1961, 10, 80-82.
- Morris, J. E. The 1973 Stanford Achievement Test series as adapted for use by the visually handicapped, Louisville, Ky.: American Printing House for the Blind, 1973.
- The Psychological Corporation. Stanford Achievement Test norms booklet, Primary 3, Forms E/F Battery. New York: Author, 1983.
- Willis, D.H. Academic achievement of legally blind students. Louisville, Ky.: American Printing House for the Blind, 1983.

Table 1

Stanford Achievement Test 1982

Subtests and Recommended Grade Ranges

Level	Primary 2	Primary 3	Intermediate 1	Intermediate 2	Advanced	Task 1	Task 2
Grade	2.5-3.9	3.5-4.9	4.5-5.9	5.5-7.9	7.0-9.9	8.0-12.9	9.0-13
Subtest	Word Reading*					Reading Vocabulary	Reading Vocabulary
	Reading Comprehension	Reading Comprehension	Reading Comprehension	Reading Comprehension	Reading Comprehension	Reading Comprehension	Reading Comprehension
	Word Study Skills	Word Study Skills	Word Study Skills Parts A & B **	Word Study Skills Parts A & B **			
	Concepts of Number	Concepts of Number	Concepts of Number	Concepts of Number	Concepts of Number		
	Mathematics Computation	Mathematics Computation Parts A & B **	Mathematics Computation Parts A & B **	Mathematics Computation Parts A & B **	Mathematics Computation ** Parts A & B **	Mathematics Parts A & B **	Mathematics Parts A & B **
	Mathematics Applications	Mathematics Applications Parts A & B **	Mathematics Applications Parts A & B **	Mathematics Applications Parts A & B **	Mathematics Applications Parts A & B **		
	Spelling Environment*	Spelling	Spelling	Spelling	Spelling	Spelling	Spelling
		Language Social Science Science	Language Social Science Science	Language Social Science Science	Language Social Science Science	English Social Science Science	English Social Science Science
	Vocabulary	Vocabulary	Vocabulary	Vocabulary	Vocabulary		
	Listening Comprehension	Listening Comprehension	Listening Comprehension	Listening Comprehension	Listening Comprehension		

*Subtests which were not adapted into braille.

**Tests divided into two parts in the braille editions only.